9 August 2003

#### REMARKS

This is in response to the communication mailed 9 April, 2003.

Claims 1-5 and 20-49 are pending. Claims 5-16 were cancelled by the amendment filed 23 August, 2002. Claims 17-19 are cancelled by this Amendment. Claim 20 is amended to cancel the dependency from claim 19. Claim 40 is amended to correct a typographical error.

#### Claims 1-4

(

{

The Examiner had raised Welch et al. as an obstacle to the patentability of claims 1-4 and 17-49. As discussed by telephone with the Examiner on 21 July, 2003, Welch et al fails to teach or suggest "focusing a selected input light beam on a first selected reflective optical switching element" as claimed in claim 1. By contrast, Welch et al. disclose a switch in which collimated light beams interact with gratings (17). Where Welch et al. refer to "focusing" at col. 3, ln. 5-7, Welch et al. are referring to elements (23) which focus the collimated beam deflected by a grating (17) into an output amplifier (25) as described at col. 4, ln. 38-40.

The other cited references fail to remedy this deficiency.

Therefore, the Applicant submits that claim 1, and claims 2-4 which depend from claim 1, are in condition for allowance.

#### Claims 21-24

Claim 21 recites "wherein more than one of said selectable reflective optical elements are located within the range over which said adaptive optical element is capable of focusing said selected input light beam". The Applicant submits that this feature in combination with the other elements of claim 21 distinguishes the cited references.

Therefore the Applicant submits that claim 21, and claims 22-24 which depend from claim 21 are in condition for allowance.

#### Claims 25-37

Claim 25 recites "the at least one adjustable focus optical element configured to focus the optical signal onto a currently selected one of the reflective elements and, upon a different one of the reflective elements becoming the currently selected one of the reflective elements, to vary a focus of the adjustable focus optical element to focus the optical signal onto the

## Amendment to Richardson, 09/835,543

9 August 2003

different one of the reflective elements". The Applicant submits that this feature in combination with the other elements of claim 25 distinguishes the cited references.

Therefore the Applicant submits that claim 25, and claims 26-37 which depend from claim 25 are in condition for allowance.

#### Claim 38

Claim 38 has been amended for clarity.

Claim 38 recites "a plurality of adjustable focus optical elements, each of the adjustable focus optical elements ... capable of focusing an optical signal from the corresponding one of the input channels onto any one of a plurality of the plurality of individually switchable reflective elements, each of the plurality of the plurality of individually switchable reflective elements located to require a different focus setting of the adjustable focus optical element". The Applicant submits that this feature in combination with the other elements of claim 38 distinguishes the cited references.

Therefore the Applicant submits that claim 38 is in condition for allowance.

#### Claim 39

ţ

Claim 39 recites "operating an adjustable focus optical element to focus the optical signal from the input channel onto the reflective element". The Applicant submits that this feature in combination with the other elements of claim 39 distinguishes the cited references.

Therefore the Applicant submits that claim 39, and claims 40-45 which depend from claim 39 are in condition for allowance.

### Claim 46

Claim 46 has been amended for clarity. Claim 46 recites "altering a focus of an optical signal from the selected input channel to focus the optical signal onto the actuated reflective element". The Applicant submits that this feature in combination with the other elements of claim 46 distinguishes the cited references.

Therefore, the Applicant submits that claim 46, and claims 47-48 which depend from claim 46 are in condition for allowance.

# Amendment to Richardson, 09/835,543

9 August 2003

## Claim 49

Claim 49 recites "focusing a selected radiation beam on a first selected reflective optical switching element; selecting a second reflective optical switching element; and, focusing the selected radiation beam on the second reflective optical switching element." The Applicant submits that this feature in the context of claim 49 distinguishes the cited references.

Therefore, the Applicant submits that claim 49 is in condition for allowance.

#### Other Art

The Examiner drew the Applicant's attention to Giles et al. (6,411,751). The Applicant submits that all of the pending claims distinguish Giles et al. Giles et al. fails to disclose a variable focus optical element and fails to teach or suggest the features of the independent claims of this application which are referenced above.

## Conclusion

The Applicant respectfully requests reconsideration and allowance of this application in view of the amendments and remarks presented above.

Respectfully submitted,

By:

Gavin N. Manning

Registration No.: 36,412

Tel. No. (604) 669-3432 Fax No. (604) 681-4081